



**OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY
OREGON TITLE V OPERATING PERMIT**

Northwest Region
700 N.E. Multnomah St., Suite 600
Portland, OR 97232
503-229-5263

Issued in accordance with the provisions of
ORS 468A.040 and based on the land use compatibility findings included in the permit record.

ISSUED TO:

Owens-Brockway Glass Container Inc.
9710 NE Glass Plant Rd
Portland, OR 97220

INFORMATION RELIED UPON:

Application Number: 025752
Received: 12/28/2010

PLANT SITE LOCATION:

9710 NE Glass Plant Road
Portland, OR 97220

LAND USE COMPATIBILITY STATEMENT:

From: City of Portland
Dated: 03/14/1995

ISSUED BY THE DEPARTMENT OF ENVIRONMENTAL QUALITY

Matt Hoffman, Northwest Region Air Quality Manager

Date

Nature of Business

Container Glass Manufacturing

SIC

3221

NAICS

327213

RESPONSIBLE OFFICIAL:

Title: Plant Manager

FACILITY CONTACT PERSON:

Title: EHS Manager/Plant Engineer
Phone: (567) 336-3429/3430

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LIST OF ABBREVIATIONS THAT MAYBE USED IN THIS PERMIT

ACDP	Air Contaminant Discharge Permit	I&M	Inspection and maintenance
acfm	actual cubic foot per minute	LPG	Liquefied petroleum gas
Act	Federal Clean Air Act	MB	Material balance
AQMA	Air quality management area	mg/l	milligrams per liter
As	Arsenic	Mn	Manganese
ASTM	American Society of Testing and Materials	mvac	Motor vehicle air conditioner
Be	Beryllium	NG	Natural gas
Btu	British thermal unit	Ni	Nickel
Cd	Cadmium	NO _x	Nitrogen oxides
CFR	Code of Federal Regulations (§)	O ₂	Oxygen
CO	Carbon Monoxide	OAR	Oregon Administrative Rules
CO ₂	Carbon dioxide	ODEQ	Oregon Department of Environmental Quality
CO _{2e}	carbon dioxide equivalent	ORS	Oregon Revised Statutes
COMS	Continuous opacity monitoring system	O&M	Operation and maintenance
CPMS	Continuous parameter monitoring system	Pb	Lead
Cr	Chromium	PCD	Pollution Control Device
Cr ⁺⁶	Hexavalent Chromium	PM	Particulate matter
Cu	Copper	PM ₁₀	Particulate matter less than 10 microns in size
DEQ	Department of Environmental Quality	PM _{2.5}	Particulate matter less than 2.5 microns in size
dscf	Dry standard cubic feet	ppm	Parts per million
EF	Emission factor	PSD	Prevention of Significant Deterioration
EPA	US Environmental Protection Agency	PSEL	Plant Site Emission Limit
EU	Emissions Unit	psia	pounds per square inch, actual
FCAA	Federal Clean Air Act	RACT	Reasonably Available Control Technology
FSA	Fuel sampling and analysis	scf	Standard cubic foot
GHG	greenhouse gas	SER	Significant Emissions Rate
gr/dscf	Grain per dry standard cubic feet (1 pound = 7000 grains)	SERP	Source emissions reduction plan
HAP	Hazardous Air Pollutant as defined by OAR 340-244-0040	SIP	State Implementation Plan
HCFC	Halogenated Chloro-Fluoro-Carbons	SNAP	Significant New Alternative Policy
Hg	Mercury	SO ₂	Sulfur dioxide
H ₂ S	Hydrogen Sulfide	ST	Source test
ID	Identification number or label	VE	Visible emissions
I&M	Inspection and maintenance	VMT	Vehicle miles traveled
NA	Not applicable	VOC	Volatile organic compounds
ID	Identification number		

PERMITTED ACTIVITIES

1. Until such time as this permit expires or is modified or revoked, the permittee is allowed to discharge air contaminants from those processes and activities directly related to or associated with air contaminant source(s) in accordance with the requirements, limitations, and conditions of this permit. [OAR 340-218-0010 and 340-218-0120(2)]
2. All conditions in this permit are federally enforceable, meaning that they are enforceable by DEQ, EPA, and citizens under the Clean Air Act, except Conditions 8, 9, G5, and G9 (OAR 340-248-0005 through 340-248-0180) are only enforceable by the state. [OAR 340-218-0060]

EMISSIONS UNIT (EU) AND POLLUTION CONTROL DEVICE (PCD) IDENTIFICATION

3. The emissions units and pollution control devices regulated by this permit are the following [OAR 340-218-0040(3)]:

EU ID	EMISSIONS UNIT (EU) Description	EU Device ID	PCD	PCD ID
EU1	Raw material (excluding cullet) handling activities including unloading conveyor/elevator & storage silos	RMU1 to RMU3	Raw material baghouse Batch baghouse	RMBH-1 RMBH-2 RMBH-3
EU2	Cullet crusher (in-house)	CC5	None	--
EU3	Raw material blending equipment including conveyors/elevators, weigh bin hopper & surge bin, mixers/chargers.	RMB1 to RMB3	Batch baghouse	RMBH-2
EU4	Glass melting furnaces A and D	GM1 & GM4	None	--
EU5	Hot end surface treatment units Mold swabbers	HEST1 - 4 MS1 to MS4	HEST Abatement (NH ₃ injected baghouse)	HEST-A --
EU6	Natural gas combustion sources: Refiners Forehearths Lehrs Mold burnout/curing oven Mold heat oven Quick fire oven	R1 to R4 FH1 to FH4 LH1 to LH4 MO-1 MH-1 QF-1	None	--
EU7	Boiler	B1	None	--
EU10	Machine repair dust collector at the machine repair area. Mold bench dust collector at the mold repair bench area.		Baghouse Baghouse	MRD-1 MBD-1

EMISSION LIMITS AND STANDARDS

The following tables and conditions contain the applicable requirements along with testing, monitoring, and recordkeeping requirements for the emissions units to which those requirements apply.

Table-I. Summary of Facility-wide Emission Limits and Standards

Applicable Requirements		Pollutant/ Parameter	Limit/ Standard	Monitoring Requirements	
OAR/CFR	Condition No.			Method	Cond No.
340-206-0050	4	Pollutants specified	SERP	Recordkeeping	5
340-208-0210	6	Fugitive dust	Preventive maintenance	I&M Recordkeeping	7
340-208-0450	8	PM >250μ	no fallout	I&M Recordkeeping	10
340-208-0300	9	Nuisance	no nuisance		
40 CFR Part 68	11	Risk Management	Risk Management Plan	NA	11

4. **SOURCE EMISSION REDUCTION PLAN:** In the event an Air Pollution Alert, Warning, or Emergency Episode for the pollutant specified below is declared in the Portland area by the Department, the permittee must take the action appropriate to the episode condition as described below. The permittee must take such action when the permittee first becomes aware of such a declaration whether through news media, direct contact with the Department, or from other sources. [OAR 340-206-0050]

<u>Episode Level</u>	<u>Pollutant</u>	<u>Action to be taken</u>
<u>Alert:</u>	<u>Any pollutant</u>	<ol style="list-style-type: none"> 1. Review SERP to prepare for possible further action. 2. Postpone any scheduled increase in production. 3. Actively promote and organize car pools for employees.
<u>Warning:</u>	<u>PM₁₀</u>	<ol style="list-style-type: none"> 1. Reduce production wherever feasible. 2. Postpone any maintenance on furnace or boiler firing system.
	<u>CO</u>	<ol style="list-style-type: none"> 1. Organize carpooling to achieve at least 3 passengers per vehicle
	<u>Ozone</u>	<ol style="list-style-type: none"> 1. Prohibit spray painting operations.
<u>Emergency:</u>	<u>Any pollutant</u>	<ol style="list-style-type: none"> 1. Cease production and place glass furnaces on a shutdown status, except maintain the minimum temperature to prevent glass solidification. 2. Reduce the number of employees at the plant to a skeleton crew to prevent damage to process equipment and to provide security.

5. **MONITOR AND RECORD:** The permittee must maintain a log summarizing actions taken during an applicable air pollution episode pursuant to Condition 4.

6. **FUGITIVE DUST CONTROL REQUIREMENT:** The permittee must not cause, suffer, allow, or permit any materials to be handled, transported, or stored; or a building, its appurtenances, or a road to be used, constructed, altered, repaired or demolished; or any equipment to be operated, without taking reasonable precautions to prevent particulate matter from becoming airborne in accordance with OAR 340-208-0210.
7. **MONITOR AND RECORD:** The permittee must inspect the area where fugitive visible emissions could occur, including but not limited to material transport and storage equipment, raw material unloading and handling area, cullet crushers, etc.
 - 7.a. The visible emissions survey must be conducted daily during periods when the potential for visible emissions exists such as when materials are being unloaded or when waste bins are being emptied, and during dry high-wind days.
 - 7.b. If visible fugitive emissions are present, check the equipment/operations for malfunction and correct the problem as needed.
 - 7.c. Inspect the material loading and unloading activities and improve the housekeeping activities and practices to help minimize fugitive emissions.
 - 7.d. Record in a log, the date, weather conditions, inspection results and any clean-up and/or corrective actions taken.

8. **PARTICLE FALLOUT LIMIT:** The permittee must not cause or permit the emission of any particulate matter larger than 250 microns in size at sufficient duration or quantity as to create an observable deposition upon the real property of another person, as required in OAR 340-208-0450. [State-only enforceable]
9. **NO NUISANCE REQUIREMENT:** The permittee must not cause or allow air contaminants from any source to cause a nuisance. Nuisance conditions will be verified by DEQ personnel. [OAR 340-208-0300] [State only enforceable]
10. **MONITOR AND RECORD:** The permittee must maintain a log of each nuisance complaint received by the permittee during the operation of the facility. Documentation must include date of contact, time of observed nuisance condition, description of nuisance condition, location of receptor, status of plant operation during the observed period, and time of response to complainant. A plant representative must immediately investigate the condition following the receipt of the nuisance complaint and a plant representative must provide a response to the complainant within 24 hours, if possible. [OAR 340-218-0050(3)(a)]

11. **ACCIDENTAL RELEASE PREVENTION:** Should this stationary source become subject to the accidental release prevention regulations in 40 CFR Part 68, then the permittee must submit a risk management plan (RMP) by the date specified in 40 CFR 68.10 and comply with the plan and all other applicable Part 68 requirements. [40 CFR Part 68]

Table-II. Requirements for GM1 and GM4 Furnaces

Applicable Requirement	Condition Number	Pollutant/Parameter	Limit/Standard	Monitoring Requirement	Monitoring Condition
40 CFR 60.293(b)	12	PM/PM ₁₀	1 lb PM/ton glass	Source Testing	13
340-226-0210(2)(a)	14	PM/PM ₁₀	0.10 gr/scf	Source Testing	13, 35
40 CFR 60.293(c)	15 & 16	Opacity	See Condition 15	COMS	15 & 16
340-208-0110	17	Opacity	< 20%, 6 min block avg.	COMS	18
AQ/V-NWR-11-092	19	Opacity	Corrective Action Plan	I&M Recordkeeping	19
40 CFR 63.11451	20	Metal HAPs	0.02 lb HAPs/ton glass (glass manufacturing metal HAPs)	Source Testing I&M Recordkeeping	21 22

12. **PARTICULATE MATTER NSPS EMISSIONS STANDARD FOR GM1 & GM4 FURNACES:** The emissions of particulate matter from glass melting furnaces GM1 or GM4 must not exceed 0.5 grams per kilogram of glass produced (1 lb PM/ton glass), as measure in accordance with methods and procedures specified in Condition 13. [40 CFR 60.293 (b)(1)]

13. **TESTING REQUIREMENT FOR GM1 & GM4:** Within 5 years from the date of the previous source test and every 5 years thereafter, the permittee must determine the PM emissions from glass melting furnaces GM1 and GM4 in accordance with the following methods and procedures:

- 13.a. Compute the PM emission rate from each furnace using the following equation:

$$E = ((c_s Q_{sd}) - A) / P$$

where:

E = emission rate of particulate matter, g/kg
 c_s = concentration of particulate matter, g/dscm
 Q_{sd} = volumetric flow rate, dscm/hr
A = zero production rate correction, 227 g/hr
P = glass production rate, kg/hr

- 13.b. Use EPA method 5 to determine the PM concentration (c_s) and volumetric flow rate (Q_{sd}) of the effluent gas. The sampling time and sample volume for each run must be at least 60 minutes and 0.90 dscm (31.8 dscf).
- 13.c. Use direct measurement or material balance using good engineering practice to determine the amount of glass pulled during the performance test.

14. **PARTICULATE MATTER EMISSIONS STANDARD FOR GM1 & GM4 FURNACES:** The permittee must not cause or allow the emissions of particulate matter in excess of 0.10 grain per dry standard cubic foot, from glass melting furnaces GM1 and GM4. Particulate matter emissions can be calculated from the source test results obtained from Condition 35. [OAR 340-226-0210]

15. **NSPS - CONTINUOUS OPACITY MONITORING REQUIREMENT FOR GM1 & GM4 FURNACES:** The permittee must use continuous opacity monitoring system (COMS) to measure the opacity value of visible emissions discharged into the atmosphere from the glass-melting furnaces GM1 and GM4. [40 CFR 60.293 (c)]
- 15.a. The opacity value must be measured based on 6-minute averaging.
 - 15.b. On a daily basis, calibrate the COMS according to the manufacturer's specifications.
 - 15.c. On an annual basis, calibrate the COMS according to the procedures specified in 40 CFR 60, Appendix B, Performance Specification 1 (PS-1). The alternative procedures must be approved by the Department in writing.
 - 15.d. All opacity readings including the records of "excess emissions" must be compiled and readily accessible for inspection by the Department staff.
 - 15.e. **Opacity Value:** During the source testing conducted per Condition 13, permittee may calculate 6-minute opacity average from 24 or more data points equally spaced over each 6-minute period during the test runs using COMS. For each furnace A and D, determine the Opacity Value corresponding to the 99 percent upper confidence level of a normal distribution of 6-minute average opacity values.
 - 15.f. **Opacity Value:** The permittee may reset the Opacity Value for either furnace A or D determined in Condition 15.e by subsequent source testing in accordance with 40 CFR 60.293 (e).
 - 15.g. **Report** the Opacity Value determined through source testing conducted per either Condition 15.e or 15.f within 45-days of testing as specified in Condition 34.e.
16. **NSPS - REPORTING REQUIREMENT FOR GM1 & GM4:** The permittee must report to DEQ and EPA of all "excess emissions" determined from COMS readings of Condition 15 in accordance with the procedures specified in this condition. [40 CFR 60.7 (d) & (e)]
- 16.a. For the purpose of the notification required under this condition (but not for purpose of Condition 43), "excess emissions" are all of the opacity values based on a 6-minute average that exceed the Opacity Value corresponding to the 99 percent upper confidence level determined in Condition **15.e** or **15.f**.
 - 16.b. For the first year after source testing of Condition 13, submit quarterly summary reports (i.e., every 3-month; 1st quarter is January through March) that include a summary of excess emissions, if any, for the preceding quarter, including the following information:
 - 16.b.i. Title-V reporting form **R1002-A** signed by responsible official;
 - 16.b.ii. Duration of excess emissions (minutes) and corresponding date and time;
 - 16.b.iii. explanation of the cause of excess emissions such as startup/shutdown, process problems, and/or other known and unknown causes;
 - 16.b.iv. total duration of excess emissions during the reporting period;
 - 16.b.v. total operating time of each corresponding furnace GM1 or GM4;
 - 16.b.vi. the percentage (%) of excess emissions in comparison to total furnace operating time;
 - 16.b.vii. the percentage (%) of COMS downtime, if any, in comparison to total furnace operating time.
 - 16.b.viii. Submit the quarterly report by no later than 30 days after the end of preceding quarter.

- 16.c. Reduce the frequency of excess emission reporting to semi-annually, and submit the report no later than 30 days after the end of preceding 6-month period, if the following conditions are met: [40 CFR 60.7 (e)(1)]
- 16.c.i. The total duration of excess emissions determined in Condition **16.b.vi** is less than 1% of the total furnace operating time for the entire year; and
- 16.c.ii. COMS downtime determined in Condition **16.b.vii** for the same period is less than 5% of the total furnace operating time.
- 16.d. If total duration of excess emissions or COMS downtime determined in Condition **16.b.vi** or **16.b.vii** is equal to or greater than their respective percentage limit shown in Condition **16.c.i** or **16.c.ii**, increase the frequency of excess emission reporting to quarterly. In addition, the excess emission reporting must conform to requirements specified in 40 CFR 60.7(c), in lieu of quarterly summary report described in Condition **16.b**.
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17. **VISIBLE EMISSIONS LIMIT FOR GM1 & GM4 FURNACES:** The permittee must not cause or allow the emissions of any air contaminant into the atmosphere that is equal to or greater than 20% opacity based on 6-minute average, excluding uncombined water, from glass melting furnaces GM1 and GM4. Opacity must be measured in accordance with Condition 18. [OAR 340-208-0110]
18. **MONITOR AND RECORD:** The permittee must monitor visible emissions from the glass-melting furnaces GM1 and GM4 in accordance with the procedures, test methods, and frequencies specified in this condition:
- 18.a. The opacity reading obtained from the continuous opacity monitoring system (COMS) must be used to demonstrate compliance with the applicable 20% opacity limit specified in Condition 17.
- 18.b. The visible emissions must be measured based on the average of 24 consecutive observations recorded at 15-second interval, or more frequently, which comprise a six-minute block. Six-minute blocks need not be consecutive in time and in no case may two blocks overlap.
- 18.c. The COMS must be calibrated for daily instrument zero and upscale drift checks in accordance with Procedure-3 established in 40 CFR part 60, Appendix F.
- 18.d. The quarterly performance audits must be performed on COMS in accordance with Procedure-3 established in 40 CFR part 60, Appendix F.
- 18.e. All COMS data including the records of exceedances of the 20% opacity limit must be kept at the plant site for inspection. Monitor and record all date(s) corresponding to the exceedance period(s), if any.
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19. To prevent visible emissions from exceeding the 20% opacity limit set forth in Condition 17, the permittee must comply with the corrective action plan approved by DEQ by letter dated April 17, 2012, as amended by DEQ letters dated July 10, 2013, October 29, 2013, May 28, 2015, and September 2, 2015, and any further amendments approved by DEQ in writing. [AQ/V-NWR-11-092]
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20. **NESHAP- METAL HAPS EMISSIONS LIMIT:** The permittee must limit the mass emission rate of production-based metal HAP (i.e., glass manufacturing metal HAPs) based on a 3-hour block average to less than 0.02 pounds per ton of glass produced (0.02 lbs HAP/ton glass). [§63.11451]
- 20.a. Production based metal HAP includes an oxide or other compound of any of the following metals intentionally added as raw materials; arsenic, cadmium, chromium, lead, manganese, and nickel. Production based metal HAP do not include metals that are naturally present in the raw materials as trace constituents or contaminants of other substances, as defined in §63.11459. Cullet and materials that are recovered from the process stream and recycled into the glass formulation are not considered to be raw materials.
- 20.b. Furnace-D is the affected furnace subject to the requirements specified in Conditions 20 through 22. The permittee shall notify DEQ in writing prior to introducing any production-based metal HAP into furnace-A.
21. **TESTING REQUIREMENTS:** Within 5 years from the date of the previous source test and every 5 years thereafter, the permittee must determine the production based metal HAP emissions from glass melting furnace D (GM4) in accordance with the following methods and procedures:
- 21.a. Perform Source testing while the furnace is operating at the maximum production rate; and while producing glass that has the highest potential to emit the production based metal HAP.
- 21.b. Conduct at least three separate test runs. For each test run lasting at least one hour, compute the production based metal HAP emission rate at the furnace stack using Method 29 of 40 CFR part 60, appendix A-8.
- 21.c. Compute the 3-hour block average production-based metal HAP mass emission rate as the average of the production-based metal HAP mass emission rates for each test run:
- $$\text{MPM} = \text{ERM} / \text{P} \quad [\text{Equation 2, } [\S 63.11452(\text{b})(14)(\text{iv})]]$$
- where:
- MPM = Production based metal HAP emission rate, lbs HAP/ton glass
- ERM = Sum of the metal HAP emission rate as measured per Condition 21.b, lbs/hr
- P = glass production rate, tons/hr
22. **MONITOR AND RECORD:** The permittee must perform all required monitoring from the time the affected furnace is charged with any one of the production-based metal HAP and continue until the end of transition period. [§63.11455 (e)]
- 22.a. The transition period begins when the furnace is charged with raw materials that do not contain any of the production based metal HAP and ends when the furnace begins producing salable non-affected glass (i.e., amber colored glass).
- 22.b. Monitor and record the rate of production-based metal HAP added to the glass batch formulation as a percentage (%), for each batch formulation used.
- 22.c. Compare the production-based metal HAP raw material feed rate (%) to the highest feed rate used during source testing in Condition 21.a.
- 22.d. Until the source test results of Condition 21 becomes available, compare the production-based metal HAP raw material feed rate to the feed rate used during the 12/08/2008 source test, which was used for the initial notification.

- 22.e. Use the equation below to determine compliance with the metal HAP emission rate standard (0.02 lbs HAP/ton glass) specified in Condition 20:

$$E_{\text{HAP}} = \frac{E_{\text{HAP-ST}} * \text{FEED}_{\text{HAP}}}{\text{FEED}_{\text{HAP-ST}}} \quad (\text{lbs HAP/ton glass})$$

where

- E_{HAP} = Metal HAP emission rate
 $E_{\text{HAP-ST}}$ = Metal HAP emission rate from applicable source test of Condition 21 or 22.d
 FEED_{HAP} = Production based metal HAP raw material feed rate
 $\text{FEED}_{\text{HAP-ST}}$ = Metal HAP raw material feed rate during applicable source test of Condition 21 or 22.d

- 22.f. All records of this condition must be kept on site and available for review by DEQ.

- 22.g. Report the highest E_{HAP} noted each month with the annual report submitted per Condition 47.b.
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23. RESERVED

Table-III. Requirements for EU6 & EU7 Fuel-burning Equipment/Boiler

Applicable Requirement	Condition Number	Pollutant/Parameter	Limit/Standard	Monitoring Requirement	Monitoring Condition
340-226-0210, or 340-228-0210	24	PM/PM ₁₀	0.24 & 0.15 gr/dscf, 0.14 gr/dscf	VE Recordkeeping	30
340-208-0110	25	Opacity	< 20%, 6 min avg.	VE Recordkeeping	
340-228-0110	26	Distillate oil sulfur content	0.3% by weight 0.5% by weight	%S Analysis / Recordkeeping	27

24. **PARTICULATE MATTER EMISSIONS STANDARD FOR EU6 & EU7:** The permittee may not emit particulate matter emissions from the EU6 and EU7 fuel burning equipment in excess of the following limits. [OAR 340-228-0210(2)(a)]
- 24.a. For EU7 boiler [OAR 340-228-0210 (2)(a)(B)]
- 24.a.i. 0.24 grains per dry standard cubic foot until Dec. 31, 2019
- 24.a.ii. 0.15 grains per dry standard cubic foot on and after Jan. 1, 2020
- 24.b. For EU6 fuel burning equipment, 0.14 grains per dry standard cubic foot. [OAR 340-226-0210 (2)(b)(B)]
- 24.c. Compliance with the emissions standards in this condition is determined using:
- 24.c.i. Oregon Method 5;
- 24.c.ii. DEQ Method 8, as approved by DEQ for sources with exhaust gases at or near ambient conditions;
- 24.c.iii. DEQ Method 7 for direct heat transfer sources; or
- 24.c.iv. An alternative method approved by DEQ.
25. **VISIBLE EMISSIONS LIMIT FOR EU6 & EU7:** The permittee must not cause or allow the emissions of any air contaminant into the atmosphere that is equal to or greater than 20% opacity based on 6-minute average, excluding uncombined water, from EU6 and EU7 fuel burning equipment and/or boiler when operated. Visible emissions must be monitored in accordance with methods and frequencies specified in Conditions 30.a through 30.d, except as noted in Condition 30.h. [OAR 340-208-0110]
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26. **FUEL OIL SULFUR CONTENT REQUIREMENTS FOR EU7 BOILER:** The permittee must not burn any fuel other than natural gas, propane, butane, or the following ASTM grade fuel oils:
- 26.a. ASTM Grade-1 distillate fuel oil containing less than 0.3 percent sulfur by weight; and
- 26.b. ASTM Grade-2 distillate fuel oil containing less than 0.5 percent sulfur by weight. [OAR 340-228-0110]
27. **MONITOR AND RECORD:** The permittee must monitor the sulfur content of each batch of ASTM grade distillate fuel oil used (e.g., EU7 Boiler), in accordance with the following methods or procedures:
- 27.a. Obtaining a sulfur analysis certificate from the vendor for each batch; or
- 27.b. analyzing or having analyzed by a contract laboratory a composite of representative samples taken by the permittee from each batch of fuel oil received. Liquid fuels must be analyzed using ASTM D129-64, D1552-83, or D4057-81 Method, or other equivalent method approved by the Department.

Table-IV. Requirements for Baghouses

PCD ID	Applicable Requirements		Pollutant/ Parameter	Limit/ Standard	Monitoring Requirements	
	OAR /40CFR	Cond No.			Method	Cond No.
RMBH-1 to 3, HEST-A, MBD-1	340-226-0210	28	PM/PM ₁₀	0.15 gr/scf	VE Recordkeeping	30
RMBH-1 to 3, HEST-A, MBD-1	340-208-0110	29	Opacity	< 20%, 6-min average	VE Recordkeeping	

28. **PARTICULATE MATTER EMISSIONS STANDARD FOR ALL BAGHOUSE:** The permittee may not emit particulate matter emissions from any non-fuel burning equipment installed, constructed, or modified before June 1, 1970 in excess of the following limits. Non-fuel burning equipment include baghouses RMBH-2, RMBH-1, RMBH-3, MBD-1, and HEST-A. [OAR 340-226-0210(2)(a)]
- 28.a. 0.24 grains per dry standard cubic foot until Dec. 31, 2019
- 28.b. 0.15 grains per dry standard cubic foot on and after Jan. 1, 2020
- 28.c. Compliance with the emissions standards in this condition is determined using:
- 28.c.i. Oregon Method 5;
- 28.c.ii. DEQ Method 8, as approved by DEQ for sources with exhaust gases at or near ambient conditions;
- 28.c.iii. DEQ Method 7 for direct heat transfer sources; or
- 28.c.iv. An alternative method approved by DEQ.
29. **VISIBLE EMISSIONS LIMIT FOR BAGHOUSES:** The permittee must not cause or allow the emissions of any air contaminant into the atmosphere that is equal to or greater than 20% opacity based on 6-minute average from baghouses RMBH-2, RMBH-1, RMBH-3, MBD-1, and HEST-A, when operated. Visible emissions must be monitored in accordance with methods and frequencies specified in Condition 30. [OAR 340-208-0110]

30. **MONITOR AND RECORD:** The permittee must monitor visible emissions from each discharge stack of EU6 fuel burning equipment, EU7 boiler, and all identified baghouses (e.g., RMBH-2) in accordance with the procedures, test methods, and frequencies specified in this condition:
- 30.a. The permittee must conduct a six (6) minute visible emission survey at each monitoring point using the procedures outlined in EPA Method 22, starting with a frequency of once per calendar week. The minimum monitoring frequency specified is also the required interval between two consecutive monitoring periods, except as noted in conditions 30.g and 30.h
 - 30.b. All visible emissions observations must be conducted during operating conditions that have the potential to create visible emissions (e.g. during loading/unloading for RMBH, etc.).
 - 30.c. If visible emissions, from an individual monitoring point, are detected for more than 5% (18 seconds) of the survey time, check the equipment for malfunction and correct the problem: Then re-check for visible emissions within four hours. If visible emissions persist for more than 5% of the time, an EPA Method 9 test must be conducted on that monitoring point for a six (6) minute period in accordance with the Department's Source Sampling Manual. If any of the observations during the specified 6-minute period exceed the applicable 20% opacity limit, the observation period shall continue until 60 minutes of observations have been completed or until an exceedance of the opacity limit has been documented.
 - 30.d. If the observer is unable to conduct the visible emission survey per EPA Method 22 and/or modified EPA Method 9 tests due to visual interference caused by other visible emissions sources (e.g., fugitive emissions during high wind conditions) or due to weather conditions such as fog, heavy rain, or snow, the observer shall note such conditions on the data observation sheet and make at least three attempts in same day to conduct the surveys and/or tests at approximately 2 hours intervals throughout the day. If no observations are made for that day, the observer shall continue to attempt to conduct the visible emission survey and/or modified EPA Method 9 daily until a valid observation is made.
 - 30.e. Maintenance Requirements for All Baghouses: If the opacity exceedance is noted, or when the pressure drop falls outside the normal operating range, within 24 hours of the noted exceedance, the permittee must follow up with an investigation and determine the cause of the problem, and take corrective actions as necessary to resolve the problem:
 - 30.e.i. Check the baghouse operations for any malfunction, and correct the malfunction if present.
 - 30.e.ii. Perform any needed maintenance and housekeeping activities to minimize and/or prevent fugitive emissions associated with the material handling activities.
 - 30.e.iii. Change the bags annually, or when the pressure drop falls outside the normal operating range, whichever comes first.
 - 30.f. Monitoring and Recording requirements for baghouses RMBH2 and HEST-A:
 - 30.f.i. Monitor and record the pressure drops of RMBH2 and HEST-A baghouse on a daily basis.
 - 30.f.ii. Conduct a brief-walkabout inspection of material collection equipment and surrounding area including the RMBH2 ductwork/conveyor gangway for any maintenance and/or repair items; and promptly follow up with necessary maintenance and/or repair works.
 - 30.f.iii. Record in a log the daily pressure drop readings; and any maintenance and/or repair works performed.

- 30.g. Reduced Monitoring for All Baghouses: If visible emissions surveys conducted during 10 consecutive observation weeks show no visible emissions for a particular source, the permittee may reduce the minimum monitoring frequency to once per month for that source. Anytime the monthly visible emissions survey show any visible emissions, or when requested by the Department inspector, the observations for that source of visible emissions shall start over with weekly surveys, as noted in Condition 30.a.
- 30.h. Exemptions for EU6 and EU7 when burning natural gas: As long as the EU6 and/or EU7 fuel burning equipment burns natural gas or LPG, visible emissions from that equipment is assumed to be in compliance with the 20% opacity limit; and the visible emissions survey required by this condition is waived for that equipment. For the purpose of fuel-usage verification, the permittee is required to monitor and record the type(s) of fuel used in EU6 and EU7, as specified in condition 33.a.

Insignificant Activities Requirements

31. DEQ acknowledges that insignificant emissions units (IEUs) identified by rule as either categorically insignificant activities or aggregate insignificant emissions as defined in OAR 340-200-0020 exist at facilities required to obtain an Oregon Title V Operating Permit. IEUs must comply with all applicable requirements. In general, the requirements that could apply to IEUs are incorporated as follows:

- 31.a. OAR 340-208-0110 (< 20% opacity, 6-minute average)
- 31.b. OAR 340-228-0210 (0.10 gr/dscf corrected to 12% CO₂ or 50% excess air for fuel burning equipment)
- 31.c. OAR 340-226-0210 (0.10 gr/dscf for non-fugitive, non-fuel burning equipment)

Unless otherwise specified in this permit or an applicable requirement, DEQ is not requiring any testing, monitoring, recordkeeping, or reporting for the applicable emissions limits and standards that apply to IEUs. However, if testing were performed for compliance purposes, the permittee would be required to use the test methods identified in the definitions of “opacity” and “particulate matter” in OAR 340-200-0020 and perform the testing in accordance with DEQ’s Source Sampling Manual.

PLANT SITE EMISSION LIMITS

32. **ANNUAL PSEL REQUIREMENT:** The plant site emissions must not exceed the following limits for any 12 consecutive calendar month period: [OAR 340-222-0035 through OAR 340-222-0041]:

Pollutant:	PM₁₀	PM_{2.5}	SO₂	NO_x	CO	VOC	GHG (CO_{2e})	Pb
PSEL: (tons/yr)	109	100	184	382	99	39	100,521	0.5

33. **MONITOR AND RECORD:** The permittee must determine compliance with the Plant Site Emissions Limits specified in Condition 32 in accordance with the procedures, test methods, and frequencies identified in this condition. The permittee must retain records of all parameters used to determine compliance with the PSEL:

- 33.a. The permittee must monitor and maintain monthly and annual records of the following material and process parameters:

Operating Parameter (P_i)		EU ID	Min. frequency	Method
Raw materials (tons) processed, excluding cullet	P ₁	EU1	monthly	Recordkeeping
Cullet (tons) processed	P ₂	EU2	monthly	Recordkeeping
Raw materials (tons) processed	P ₃	EU3	monthly	Recordkeeping
Glass (tons) melted Natural Gas (10 ⁶ ft ³) burned	P ₄	GM1 & GM4	monthly	Production Records, Fuel usage from meter/ gauge readings, etc.
Swab materials (lbs) used (MS1-4). MBTT (tons) used (HEST1-4).	P ₅	EU5	monthly	Recordkeeping
Natural Gas (10 ⁶ ft ³) burned	P ₆	EU6	monthly	Fuel usage estimates from meter/gauge readings.
Natural Gas (10 ⁶ ft ³) burned	P ₇	EU7	monthly	
Fuel Oil (gallons) burned				
Estimated hours of operations.	P ₁₀	EU10	monthly	Recordkeeping

- 33.b. At the end of each month, calculate the monthly emissions from each of the emissions units identified by applying operating parameter (P_i) identified in Condition 33.a and the emission factors identified for that unit and specific pollutant specified in this Condition 33.b below:

$$E_{MO,i} = P_i EF_{ij} K$$

where: E_{MO,i} = monthly pollutant emissions from individual EU_i; lbs/month, or tons/month.

P_i = operating parameters identified in Condition 33.a.

EF_{ij} = emission factor for the pollutant and EU identified in this condition.

K = Conversion factor; 1 ton/2,000 lbs

Emissions of fine particulate matter, PM_{2.5} is

$$E_{PM2.5} = 0.92 \times E_{PM10}$$

33.b.i. Emission Factors (EF_i) for Process emissions units EU1, EU2, EU3, EU5, EU10

Emissions Unit	PM ₁₀	SO ₂	VOC	Unit
EU1	18 x 10 ⁻⁴	--	--	lbs/ton raw materials
EU2	18 x 10 ⁻²	--	--	lbs/ton cullet
EU3	18 x 10 ⁻⁴	--	--	lbs/ton raw materials
EU5	1 22	-- --	-- 90	lbs/lb swab material lbs/ton MBTT used
EU10	0.2	--	--	lbs/hr operated ^(-A-)

^(-A-) multiply EF to estimated number of hours operated in month or year. Default = 8760 hrs/yr.33.b.ii. Emission Factors (EF_i) for EU4 Glass Melting Furnaces

EU ID	Parameter	PM ₁₀ ⁽²⁾	SO ₂ ⁽¹⁾	NO _x	CO	VOC	Pb	UNIT
EU4	Natural Gas	-b-	-b-	-b-	35	5.8	--	lbs/10 ⁶ ft ³
GM1	Glass melted	0.7	2.1	4.7	-a-	-a-	1.65x 0 ⁻³	lbs/ton glass
GM4	Glass melted	0.6	2.1	3.7	-a-	-a-	1.65x10 ⁻³	lbs/ton glass

⁽¹⁾ SO₂ EF for oil is a function of sulfur content (%S), which is obtained per monitoring specified in Condition 27.⁽²⁾ 96% of PM/PM₁₀ is consider to be PM_{2.5}

-a- The CO & VOC emissions from the furnaces are a function of the NG combustion.

-b- The emissions are reported under emissions from glass melting.

33.b.iii. Emission Factors (EF_i) for Combustion emissions units EU6 & EU7.

EU ID	Fuel	PM ₁₀	SO ₂	NO _x	CO	VOC	UNIT
EU6	Nat. gas ⁽⁻³⁻⁾	2.5	2.6	100	21	5.8	lbs/10 ⁶ ft ³
EU7	Nat. gas ⁽⁻³⁻⁾	2.5	2.6	140	35	5.8	lbs/10 ⁶ ft ³
	Distillate Oil	2	142 (%S)	20	5	0.56	lbs/10 ³ gal

⁽³⁾ The permittee is allowed to switch from/to NG to/from Propane (LPG) at any time.

- 33.c. The compliance with the annual PSELs set forth in Condition 32 is determined 12 times per year. At the end of each month, add up the monthly emissions for each criteria pollutant for the previous 12 month period:

$$E_{\text{Annual}} = \sum_{\text{Past 12-month}} E_{\text{MO},i}$$

- 33.d. The emissions factors listed in Condition 33.b, by themselves, are not enforceable limits. The operating parameters monitored per Conditions 33.a and emission factors provided in condition 33.b shall only be used to determine compliance with PSELs.

GENERAL TESTING REQUIREMENTS [OAR 340-218-0050(1)]

34. Unless otherwise specified in this permit, the permittee must conduct all testing in accordance with the Department's Source Sampling Manual. [OAR 340-212-0120]
- 34.a. Unless otherwise specified by a state or federal regulation, the permittee must submit a source test plan to DEQ at least 30 days prior to the date of the test. The test plan must be prepared in accordance with the Source Sampling Manual and address any planned variations or alternatives to prescribed test methods. Permittee should be aware, if significant variations are requested, it may require more than 30 days for DEQ to grant approval and may require EPA approval in addition to approval by DEQ.
- 34.b. Only regular operating staff may adjust the processes or emission control device parameters during a compliance source test and within two (2) hours prior to the tests. Any operating adjustments made during a compliance source test, which are a result of consultation during the tests with source testing personnel, equipment vendors, or consultants, may render the source test invalid.
- 34.c. Unless otherwise specified by permit condition or Department approved source test plan, all compliance source tests must be performed as follows:
- 34.c.i. at least 90% of the design capacity for new or modified equipment;
- 34.c.ii. at least 90% of the maximum operating rate for existing equipment; or
- 34.c.iii. at 90 to 110% of the normal maximum operating rate for existing equipment. For purposes of this permit, the normal maximum operating rate is defined as the 90th percentile of the average hourly operating rates during a 12 month period immediately preceding the source test. Data supporting the normal maximum operating rate must be included with the source test report.
- 34.d. Each source test must consist of at least three (3) test runs and the emissions results must be reported as the arithmetic average of all valid test runs. If for reasons beyond the control of the permittee a test run is invalid, DEQ may accept two (2) test runs for demonstrating compliance with the emission limit or standard.
- 34.e. Source test reports prepared in accordance with DEQ's Source Sampling Manual must be submitted to DEQ within 45 days of completing any required source test, unless a different time period is approved in the source test plan submitted prior to the source test.
35. **EU4 EMISSION FACTOR VERIFICATION TESTING REQUIREMENTS:** Within 5 years from the date of the previous source test and every 5 years thereafter, the permittee must verify the accuracy of the PM₁₀, SO₂, NO_x, CO, and VOC emission factors used to determine compliance with the PSEL by testing in accordance with the methods specified for the pollutant and devices identified. In addition, determine the grain loading rate from each furnace.

EU4 Furnaces	Pollutant	Method(s) ⁻¹⁻
GM1 (Furnace-A) And GM4 (Furnace-D)	Grain load (gr/scf), PM ₁₀ & PM _{2.5}	EPA Method 5 & 202 (PM _{2.5} = 96% of PM ₁₀)
	SO ₂	EPA Method 6c
	NO _x	EPA Method 7E
	CO	EPA Method 10
	VOC	EPA Method 25A
	Volumetric Flow Rate	EPA Method 1-4
	Metals including Cr, Pb, As, Cd, Mn, Ni, Hg, Cu, Co, Se, Be	EPA Method 29 ⁻²⁻
	Opacity	EPA Method 9

-1- The Analytical Methods listed in this table may be substituted with another method if deemed necessary by DEQ source test coordinator.

-2- Chromium (Cr) detected using EPA Method 29 shall be considered hexavalent chromium (Cr⁺⁶) unless EPA SW-486 Method 0061 or other DEQ approved method is used to isolate Cr⁺⁶ from total Cr.

GENERAL MONITORING AND RECORDKEEPING REQUIREMENTS [OAR 340-218-0050(3)(b)]**General Monitoring Requirements:**

- 36. The permittee must not knowingly render inaccurate any required monitoring device or method. [OAR 340-218-0050(3)(a)(E)]
- 37. Methods used to determine actual emissions for fee purposes must also be used for compliance determination and can be no less rigorous than the requirements of OAR 340-218-0080. [OAR 340-218-0050(3)(a)(F)]
- 38. Monitoring requirements must commence on the date of permit issuance unless otherwise specified in the permit or an applicable requirement. [OAR 340-218-0050(3)(a)(G)]

GENERAL RECORDKEEPING REQUIREMENTS

- 39. The permittee must maintain the following general records of testing and monitoring required by this permit: [OAR 340-218-0050(3)(b)(A)]
 - 39.a. the date, place as defined in the permit, and time of sampling or measurements;
 - 39.b. the date(s) analyses were performed;
 - 39.c. the company or entity that performed the analyses;
 - 39.d. the analytical techniques or methods used;
 - 39.e. the results of such analyses;
 - 39.f. the operating conditions as existing at the time of sampling or measurement; and
 - 39.g. the records of quality assurance for continuous monitoring systems (including but not limited to quality control activities, audits, calibration drift checks); and
 - 39.h. source-specific recordkeeping requirements stated elsewhere throughout the permit that include the following:
 - 39.h.i. Records of actions taken, if any, per SERP;
 - 39.h.ii. visual inspection results, and a summary of corrective actions taken, if any;
 - 39.h.iii. nuisance complaint log and investigation reports, if any;
 - 39.h.iv. visible emissions observation reports for emissions units identified;
 - 39.h.v. records of the type and daily and/or monthly records of the product and amount of fuels used, as defined in the permit; and
 - 39.h.vi. source test summary reports and results.
- 40. Unless otherwise specified by permit condition, the permittee must make every effort to maintain 100 percent of the records required by the permit. If information is not obtained or recorded for legitimate reasons (e.g., the monitor or data acquisition system malfunctions due to a power outage), the missing record(s) will not be considered a permit deviation provided the amount of data lost does not exceed 10% of the averaging periods in a reporting period or 10% of the total operating hours in a reporting period, if no averaging time is specified. Upon discovering a required record is missing, the permittee must document the reason for the missing record. In addition, any missing record that can be recovered from other available information will not be considered a missing record. [OAR 340-214-0110, 340-214-0114, and 340-218-0050(3)(b)]

41. Recordkeeping requirements must commence on the date of permit issuance unless otherwise specified in the permit or an applicable requirement. [OAR 340-218-0050(3)(b)(C)]
42. Unless otherwise specified, the permittee must retain records of all required monitoring data and support information for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings (or other original data) for continuous monitoring instrumentation, and copies of all reports required by the permit. All existing records required by the previous Air Contaminant Discharge Permit or Oregon Title V Operating Permit must also be retained for five (5) years from the date of the monitoring sample, measurement, report, or application. [OAR 340-218-0050(b)(B)]

GENERAL REPORTING REQUIREMENTS [OAR 340-218-0050(3)(c)]

43. Excess Emissions Reporting The permittee must report all excess emissions as follows: [OAR 340-214-0300 through 340-214-0360]
 - 43.a. Immediately (within 1 hour of the event) notify DEQ of an excess emission event (but not for purpose of Condition 16) by phone, email, or facsimile; and
 - 43.b. Within 15 days of the excess emissions event, submit a written report that contains the following information: [OAR 340-214-0340(1)]
 - 43.b.i. The date and time of the beginning of the excess emissions event and the duration or best estimate of the time until return to normal operation;
 - 43.b.ii. The date and time the owner or operator notified DEQ of the event;
 - 43.b.iii. The equipment involved;
 - 43.b.iv. Whether the event occurred during planned startup, planned shutdown, scheduled maintenance, or as a result of a breakdown, malfunction, or emergency;
 - 43.b.v. Steps taken to mitigate emissions and corrective action taken, including whether the approved procedures for a planned startup, shutdown, or maintenance activity were followed;
 - 43.b.vi. The magnitude and duration of each occurrence of excess emissions during the course of an event and the increase over normal rates or concentrations as determined by continuous monitoring or best estimate (supported by operating data and calculations);
 - 43.b.vii. The final resolution of the cause of the excess emissions; and
 - 43.b.viii. Where applicable, evidence supporting any claim that emissions in excess of technology-based limits were due to any emergency pursuant to OAR 340-214-0360.
 - 43.c. In the event of any excess emissions which are of a nature that could endanger public health and occur during non-business hours, weekends, or holidays, the permittee must immediately notify DEQ by calling the Oregon Accident Response System (OARs). The current number is 1-800-452-0311.
 - 43.d. If startups, shutdowns, or scheduled maintenance may result in excess emissions, the permittee must submit startup, shutdown, or scheduled maintenance procedures used to minimize excess emissions to DEQ for prior authorization, as required in OAR 340-214-0310 and 340-214-0320. New or modified procedures must be received by DEQ in writing at least 72 hours prior to the first occurrence of the excess emission event. The permittee must abide by the approved procedures and have a copy available at all times.
 - 43.e. The permittee must notify DEQ of planned startup/shutdown or scheduled maintenance events.

- 43.f. The permittee must continue to maintain a log of all excess emissions in accordance with OAR 340-214-0340(3). However, the permittee is not required to submit the detailed log with the semi-annual and annual monitoring reports. The permittee is only required to submit a brief summary listing the date, time, and the affected emissions units for each excess emission that occurred during the reporting period. [OAR 340-218-0050(3)(c)]
44. Permit Deviations Reporting: The permittee must promptly report deviations from permit requirements that do not cause excess emissions, including those attributable to upset conditions, as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. "Prompt" means within 15 days of the deviation. Deviations that cause excess emissions, as specified in OAR 340-214-0300 through 340-214-0360 must be reported in accordance with Condition 43.
45. All required reports must be certified by a responsible official consistent with OAR 340-218-0040(5); [OAR 340-218-0050(3)(c)(D)]
46. Reporting requirements must commence on the date of permit issuance unless otherwise specified in the permit. [OAR 340-218-0050(3)(c)(E)]

Addresses of regulatory agencies are the following, unless otherwise instructed:

DEQ – Northwest Region¹
700 N.E. Multnomah St., #600
Portland, OR 97232
503-229-5263

DEQ – Air Quality Division²
700 NE Multnomah St., #600
Portland, OR 97232
503-229-5359

Air Operating Permits³
US Environmental Protection Agency
Mail Stop OAQ-108
1200 Sixth Avenue
Seattle, WA 98101

¹ Submit all Notices and applications that do not include payment to the Northwest Region's Permit Coordinator.

¹ Submit all reports (annual reports, source test plans and reports, etc.) to DEQ's Northwest Region. If you know the name of the Air Quality staff member responsible for your permit, please include it.

² Submit payments for invoices, applications to modify the permit, and any other payments to DEQ's Business Office, which will move to the current NWR office location in 2016.

³ Submit all reports for EPA requirements to EPA Region 10 office in Seattle.

Semi-annual and Annual Reports

47. The permittee must submit three (3) copies of reports of any required monitoring at least every 6 months, completed on forms approved by DEQ. Six month periods are January 1 to June 30, and July 1 to December 31. One copy of the report must be submitted to the EPA and two copies to the DEQ regional office. All instances of deviations from permit requirements must be clearly identified in such reports: [OAR 340-218-0050(3)(c)(A) and 340-218-0080(6)(d)]
- 47.a. The first semi-annual report is due on July 30, unless otherwise approved in writing by DEQ, and must include the semi-annual compliance certification, OAR 340-218-0080.
- 47.b. The annual report is due on February 15, unless otherwise approved in writing by DEQ, and must include the following information:
- 47.b.i. the emission fee report; [OAR 340-220-0100]
- 47.b.ii. the NO_x and VOC emission statement, if applicable; [OAR 340-214-0220];
- 47.b.iii. a summary of the excess emissions upset log; [OAR 340-214-0340]
- 47.b.iv. the second semi-annual compliance certification; and [OAR 340-218-0080]
- 47.b.v. the annual certification that the risk management plan is being properly implemented; OAR 340-244-0230. [OAR 340-218-0080(7)]
- 47.b.vi. Other annual reporting requirements:

EMISSIONS UNIT	PARAMETERS	UNIT
Plant-wide Basis	Monthly summary of emissions of each criteria pollutant	"tons/year" noted at the end of each month

EMISSIONS UNIT	PARAMETERS	UNIT
EU1	Monthly summary of raw material usage	tons/month
EU2	Monthly summary of cullet processed	tons/month
EU3	Monthly summary of material processed	tons/month
EU4	Monthly summary of amber glass produced Monthly summary of green glass produced Monthly summary of NG used Monthly summary of highest E _{HAP}	tons/month tons/month 10 ⁶ ft ³ NG/month Lbs HAP/ton glass
EU5	Monthly summary of swab material usage Monthly summary of MBTT usage, if any	lbs/month tons/month
EU6	Monthly summary of NG usage	10 ⁶ ft ³ NG/month
EU7	Monthly summary of NG usage Monthly summary of fuel oil usage	10 ⁶ ft ³ NG/month gallons/month
EU10	Estimate number of hours operated	hours/month
RMBH2 baghouse HEST-A baghouse	Monthly summary of highest, lowest, and average pressure drop recorded	Inches of water

48. The semi-annual compliance certification must include the following (provided that the identification of applicable information may cross-reference the permit or previous reports, as applicable): [OAR 340-218-0080(6)(c)]
- 48.a. The identification of each term or condition of the permit that is the basis of the certification;
- 48.b. The identification of the method(s) or other means used by the owner or operator for determining the compliance status with each term and condition during the certification period, and whether such methods or other means provide continuous or intermittent data. Such methods and other means must include, at a minimum, the methods and means required under OAR 340-218-0050(3). *Note: Certification of compliance with the monitoring conditions in the permit is sufficient to meet this requirement, except when the permittee must certify compliance with new applicable requirements that are incorporated by reference into the permit. When certifying compliance with new applicable requirements that are not yet in the permit, the permittee must provide the information required by this condition.* If necessary, the owner or operator must identify any other material information that must be included in the certification to comply with section 113(c)(2) of the FCAA, which prohibits knowingly making a false certification or omitting material information;
- 48.c. The status of compliance with terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification must be based on the method or means designated in Condition 48.b of this rule. The certification must identify each deviation and take it into account in the compliance certification. The certification must also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance, as defined under OAR 340-200-0020, occurred; and
- 48.d. Such other facts as DEQ may require to determine the compliance status of the source.
49. Greenhouse Gas Registration and Reporting: If the calendar year emission rate of greenhouse gases (CO₂e) is greater than or equal to 2,756 tons (2,500 metric tons), the permittee must register and report its greenhouse gas emissions with DEQ in accordance with OAR 340-215. The greenhouse gas report must be certified by the responsible official consistent with OAR 340-218-0040(5).
50. Notwithstanding any other provision contained in any applicable requirement, the owner or operator may use monitoring as required under OAR 340-218-0050(3) and incorporated into the permit, in addition to any specified compliance methods, for the purpose of submitting compliance certifications. [OAR 340-218-0080(6)(e)]

NON-APPLICABLE REQUIREMENTS

51. The following State and Federal air quality requirements are not applicable to this facility for the reasons stated. [OAR 340-218-0110]

51.a. The following OARs are not applicable because the source is not in the source category cited in the rules:

Division	202	All
Division	204	0010 – 0060
Division	210	0100 – 0120, 0200 – 0220
Division	218	0090, 0100
Division	230	All
Division	232	0070 – 0240 except 0180
Division	234	All
Division	236	All
Division	238	All
Division	242	0500 – 0520, 0600 – 0630
Division	244	0200, 0230
Division	256	All except 0010, 0150, 0160
Division	258	0400

51.b. The following OARs are not applicable because the source is outside the special control area, non-attainment area or county cited in the rules:

Division	240	0100 – 0360
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51.c. The following OARs are not applicable because the source does not have specific emissions units cited in the rules:

Division	208	0550
Division	228	0200
Division	232	0050

51.d. The following OARs are not applicable because the source does not sell, distribute, use, or make available for use, the fuel type cited in the rules:

Division	204	0090
Division	228	0100, 0120
Division	258	0110 – 0300
Division	260	0030

51.e. The following OARs are not applicable because the method/procedure is not used by the facility:

Division	214	0130
Division	222	0050, 0060
Division	226	0400
Division	244	0100 – 0180

51.f. Pursuant to OAR 340-242-0420 and the voluntary Plant Site Emission Limit Reduction Agreement between the Department and the permittee, as reflected in the NO_x PSEL of Condition 32, the permittee is exempt from the Employee Commute Options (ECO) Program required in OAR 340-242-0010 through 340-242-0290.

52. The following federal regulations are not applicable to the permittee at the time of permit issuance because the source is not in the source category cited in the rules:

40 CFR Parts 55, 57,
40 CFR Part 60 except subpart CC, A, and the Appendices,
40 CFR Part 61 except subparts A, M, and the Appendices,
40 CFR Part 62 except subparts A, MM
40 CFR Part 63 except subpart 6S, A, and the Appendices,
40 CFR Parts 68, 72, 73, 75, 76, 77, 78
40 CFR Part 82 (except subpart F),
40 CFR Parts 85 through 89,
Section 129 of the FCAA, Solid Waste,
Section 183(e) of the FCAA, Consumer and commercial products,
Section 183(f) of the FCAA, Tank Vessels.

GENERAL CONDITIONSG1. General Provision

Terms not otherwise defined in the permit shall have the meaning assigned to such terms in the referenced regulation.

G2. Reference materials

Where referenced in this permit, the versions of the following materials are effective as of the dates noted unless otherwise specified in this permit:

- a. Source Sampling Manual; January 23, 1992 - State Implementation Plan Volume 3, Appendix A4;
- b. Continuous Monitoring Manual; January 23, 1992 - State Implementation Plan Volume 3, Appendix A6; and
- c. All state and federal regulations as in effect on the date of issuance of this permit.

G3. Applicable Requirements [OAR 340-218-0010(3)(b)]

Oregon Title V Operating Permits do not replace requirements in Air Contaminant Discharge Permits (ACDP) issued to the source even if the ACDP(s) have expired. For a source operating under a Title V permit, requirements established in an earlier ACDP remain in effect notwithstanding expiration of the ACDP or Title V permit, unless a provision expires by its terms or unless a provision is modified or terminated following the procedures used to establish the requirement initially. Source specific requirements, including, but not limited to TACT, RACT, BACT, and LAER requirements, established in an ACDP must be incorporated into the Oregon Title V Operating Permit and any revisions to those requirements must follow the procedures used to establish the requirement initially.

G4. Compliance [OAR 340-218-0040(3)(n)(C), 340-218-0050(6), and 340-218-0080(4)]

- a. The permittee must comply with all conditions of this permit. Any permit condition noncompliance constitutes a violation of the Federal Clean Air Act and/or state rules and is grounds for enforcement action; for permit termination, revocation and re-issuance, or modification; or for denial of a permit renewal application. Any noncompliance with a permit condition specifically designated as enforceable only by the state constitutes a violation of state rules only and is grounds for enforcement action; for permit termination, revocation and re-issuance, or modification; or for denial of a permit renewal application.
- b. Any schedule of compliance for applicable requirements with which the source is not in compliance at the time of permit issuance is supplemental to, and does not sanction noncompliance with the applicable requirements on which it is based.
- c. For applicable requirements that will become effective during the permit term, the source must meet such requirements on a timely basis unless a more detailed schedule is expressly required by the applicable requirement.

G5. Masking Emissions:

The permittee must not install or use any device or other means designed to mask the emission of an air contaminant that causes or is likely to cause detriment to health, safety, or welfare of any person or otherwise violate any other regulation or requirement. [OAR 340-208-0400] This condition is enforceable only by the State.

G6. Credible Evidence:

Notwithstanding any other provisions contained in any applicable requirement, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any such applicable requirements. [OAR 340-214-0120]

G7. Certification [OAR 340-214-0110, 340-218-0040(5), 340-218-0050(3)(c)(D), and 340-218-0080(2)]

Any document submitted to DEQ or EPA pursuant to this permit must contain certification by a responsible official of truth, accuracy and completeness. All certifications must state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and, complete. The permittee must promptly, upon discovery, report to DEQ a material error or omission in these records, reports, plans, or other documents.

G8. Open Burning [OAR Chapter 340, Division 264]

The permittee is prohibited from conducting open burning, except as may be allowed by OAR 340-264-0020 through 340-264-0200.

G9. Asbestos [40 CFR Part 61, Subpart M (federally enforceable), OAR Chapter 340-248-0005 through 340-248-0180 (state-only enforceable) and 340-248-0205 through 340-248-0280]

The permittee must comply with OAR Chapter 340, Division 248, and 40 CFR Part 61, Subpart M when conducting any renovation or demolition activities at the facility.

G10. Stratospheric Ozone and Climate Protection [40 CFR 82 Subpart F, OAR 340-260-0040]

The permittee must comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, Recycling and Emissions Reduction.

G11. Permit Shield [OAR 340-218-0110]

- a. Compliance with the conditions of the permit is deemed compliance with any applicable requirements as of the date of permit issuance provided that:
 - i. such applicable requirements are included and are specifically identified in the permit, or
 - ii. DEQ, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.
- b. Nothing in this rule or in any federal operating permit alters or affects the following:
 - i. the provisions of ORS 468.115 (enforcement in cases of emergency) and ORS 468.035 (function of department);
 - ii. the liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
 - iii. the applicable requirements of the national acid rain program, consistent with section 408(a) of the FCAA; or
 - iv. the ability of DEQ to obtain information from a source pursuant to ORS 468.095 (investigatory authority, entry on premises, status of records).
- c. Sources are not shielded from applicable requirements that are enacted during the permit term, unless such applicable requirements are incorporated into the permit by administrative

amendment, as provided in OAR 340-218-0150(1)(h), significant permit modification, or reopening for cause by DEQ.

G12. Inspection and Entry [OAR 340-218-0080(3)]

Upon presentation of credentials and other documents as may be required by law, the permittee must allow DEQ, or an authorized representative (including an authorized contractor acting as a representative of the EPA Administrator), to perform the following:

- a. enter upon the permittee's premises where an Oregon Title V Operating Permit program source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
- b. have access to and copy, at reasonable times, any records that must be kept under conditions of the permit;
- c. inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- d. as authorized by the FCAA or state rules, sample or monitor, at reasonable times, substances or parameters, for the purposes of assuring compliance with the permit or applicable requirements.

G13. Fee Payment [OAR 340-220-0010, and 340-220-0030 through 340-220-0190]

The permittee must pay an annual base fee and an annual emission fee for particulates, sulfur dioxide, nitrogen oxides, and volatile organic compounds. The permittee must submit payment to the Department of Environmental Quality, Financial Services, 811 SW 6th Ave., Portland, OR 97204, within 30 days of date DEQ mails the fee invoice or August 1 of the year following the calendar year for which emission fees are paid, whichever is later. Disputes must be submitted in writing to DEQ. Payment must be made regardless of the dispute. User-based fees will be charged for specific activities (e.g., computer modeling review, ambient monitoring review, etc.) requested by the permittee.

G14. Off-Permit Changes to the Source [OAR 340-218-0140(2)]

- a. The permittee must monitor for, and record, any off-permit change to the source that:
 - i. is not addressed or prohibited by the permit;
 - ii. is not a Title I modification;
 - iii. is not subject to any requirements under Title IV of the FCAA;
 - iv. meets all applicable requirements;
 - v. does not violate any existing permit term or condition; and
 - vi. may result in emissions of regulated air pollutants subject to an applicable requirement but not otherwise regulated under this permit or may result in insignificant changes as defined in OAR 340-200-0020.
- b. A contemporaneous notification, if required under OAR 340-218-0140(2)(b), must be submitted to DEQ and the EPA.
- c. The permittee must keep a record describing off-permit changes made at the facility that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those off-permit changes.
- d. The permit shield of condition G11 does not extend to off-permit changes.

G15. Section 502(b)(10) Changes to the Source [OAR 340-218-0140(3)]

- a. The permittee must monitor for, and record, any section 502(b)(10) change to the source, which is defined as a change that would contravene an express permit term but would not:

- i. violate an applicable requirement;
 - ii. contravene a federally enforceable permit term or condition that is a monitoring, recordkeeping, reporting, or compliance certification requirement; or
 - iii. be a Title I modification.
- b. A minimum 7-day advance notification must be submitted to DEQ and the EPA in accordance with OAR 340-218-0140(3)(b).
- c. The permit shield of Condition G11 does not extend to section 502(b)(10) changes.

G16. Administrative Amendment [OAR 340-218-0150]

Administrative amendments to this permit must be requested and granted in accordance with OAR 340-218-0150. The permittee must promptly submit an application for the following types of administrative amendments upon becoming aware of the need for one, but no later than 60 days of such event:

- a. legal change of the registered name of the company with the Corporations Division of the State of Oregon, or
- b. sale or exchange of the activity or facility.

G17. Minor Permit Modification [OAR 340-218-0170]

The permittee must submit an application for a minor permit modification in accordance with OAR 340-218-0170.

G18. Significant Permit Modification [OAR 340-218-0180]

The permittee must submit an application for a significant permit modification in accordance with OAR 340-218-0180

G19. Staying Permit Conditions [OAR 340-218-0050(6)(c)]

Notwithstanding conditions G16 and G17, the filing of a request by the permittee for a permit modification, revocation and re-issuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

G20. Construction/Operation Modification [OAR 340-218-0190]

The permittee must obtain approval from DEQ prior to construction or modification of any stationary source or air pollution control equipment in accordance with OAR 340-210-0200 through OAR 340-210-0250.

G21. New Source Review Modification [OAR 340-224-0010]

The permittee may not begin construction of a major source or a major modification of any stationary source without having received an air contaminant discharge permit (ACDP) from DEQ and having satisfied the requirements of OAR 340, Division 224.

G22. Need to Halt or Reduce Activity Not a Defense [OAR 340-218-0050(6)(b)]

The need to halt or reduce activity will not be a defense. It will not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

G23. Duty to Provide Information [OAR 340-218-0050(6)(e) and OAR 340-214-0110]

The permittee must furnish to DEQ, within a reasonable time, any information that DEQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the permittee must also furnish to DEQ copies of records required to be retained by the permit or, for information claimed to be confidential, the permittee may furnish such records to DEQ along with a claim of confidentiality.

G24. Reopening for Cause [OAR 340-218-0050(6)(c) and 340-218-0200]

- a. The permit may be modified, revoked, reopened and reissued, or terminated for cause as determined by DEQ.
- b. A permit must be reopened and revised under any of the circumstances listed in OAR 340-218-0200(1)(a).
- c. Proceedings to reopen and reissue a permit must follow the same procedures as apply to initial permit issuance and affect only those parts of the permit for which cause to reopen exists.

G25. Severability Clause [OAR 340-218-0050(5)]

Upon any administrative or judicial challenge, all the emission limits, specific and general conditions, monitoring, recordkeeping, and reporting requirements of this permit, except those being challenged, remain valid and must be complied with.

G26. Permit Renewal and Expiration [OAR 340-218-0040(1)(a)(D) and 340-218-0130]

- a. This permit expires at the end of its term, unless a timely and complete renewal application is submitted as described below. Permit expiration terminates the permittee's right to operate.
- b. Applications for renewal must be submitted at least 12 months before the expiration of this permit, unless DEQ requests an earlier submittal. If more than 12 months is required to process a permit renewal application, DEQ must provide no less than six (6) months for the owner or operator to prepare an application.
- c. Provided the permittee submits a timely and complete renewal application, this permit will remain in effect until final action has been taken on the renewal application to issue or deny the permit.

G27. Permit Transference [OAR 340-218-0150(1)(d)]

The permit is not transferable to any person except as provided in OAR 340-218-0150(1)(d).

G28. Property Rights [OAR 340-200-0020 and 340-218-0050(6)(d)]

The permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations, except as provided in OAR 340-218-0110.

G29. Permit Availability [OAR 340-200-0020 and 340-218-0120(2)]

The permittee must have available at facility at all times a copy of the Oregon Title V Operating Permit and must provide a copy of the permit to DEQ or an authorized representative upon request.

ALL INQUIRIES SHOULD BE DIRECTED TO:

Northwest Region
700 N.E. Multnomah St. Ste 600
Portland, OR 97232
Telephone: (503) 229-5263